

ABSTRACT OF THE DISCLOSURE

A method for fabricating an array pH sensor and a readout circuit device of such array pH sensor are implemented by utilizing an extended ion sensitive field effect transistor to construct the array pH sensor and related readout circuit. The
5 structure of the array sensor having this extended ion sensitive field effect transistor comprises a tin dioxide/metal/silicon dioxide multi-layer structure sensor and a tin dioxide/indium tin oxide/glass multi-layer structure sensor and has excellent properties. Furthermore, the readout circuit and the sensor utilize two signal generators for controlling and reading signals. In particular, the
10 sensor can be effective for increasing the accuracy of measurement and reducing the interference of noise.